## **Amendments to the Specification:**

Please replace the section beginning at page 49, line 10 with the following redlined section:

Figure  $15\underline{A}$  shows the results of coating a chip, whereby cross contamination was reduced.

Figure 15B shows the results of liquid phase transfection and SPTA using HEK293 cells, HeLa cells, NIT3T3 cells (also referred to as "3T3"), HepG2 cells, and hMSCs. Transfection efficiency was determined by GFP intensity.

Transfection efficiency of hMSC depending on the N/P ratio used is shown in Figure 15A. In the phase of prior liquid phase transfection (Figure 15B, upper panel), hMSC cells were dead and in the case of SPTA, cell morphology was normal (Figure 15B, lower panel).

Figure 16 shows cross contamination between each spot. A nucleic acid mixture containing fibronectin having a predetermined concentration was fixed to a chip coated with APS or PLL (poly-L-lysine) Figure 16A. Cell transfection was performed on the chip. Substantially no cross contamination was observed (upper and middle rows) Figure 16A. In contrast, significant cross contamination of fixed nucleic acids was observed on an uncoated chip (lower row) Figure 16B.